REMARKS

This Amendment is filed as a Preliminary Amendment in the Request for Continued Examination filed on even date herewith, and in response to the Final Office Action mailed on 05/16/2005 as a supplement to the Amendment After Final Rejection Under 37 CFR 1.116 filed on 06/20/2005, and in response to the Advisory Action mailed on 08/02/2005. All objections and rejections are respectfully traversed.

Claims 1 and 4-78 are in the case.

No claims were amended.

No claims were added.

Applicant respectfully requests that the Amendment After Final Rejection Under 37 CFR 1.116 filed on July 20, 2005, be entered and considered.

At paragraphs 3-4 of the Final Office Action, dated May 16, 2005, claims 1, 4-27, 30, 31, 35, 37, 47, 48-58, 60-72, and 74-78 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wesley et al., U.S. Patent No. 6,693,907 B1 issued on February 17, 2004 (hereinafter Wesley).

The present invention, as set forth in representative claim 1, comprises in part:

1. A router controlling congestion on links attached to the router, said router comprising:
a plurality of ports;
a first port of said plurality of ports for receiving a data packet;
a second port of said plurality of ports for transmitting said data packet;
a receiver to receive an incoming loss report message on said second port;
a first processor to determine loss of packets on selected ports of said plurality of ports;
a second processor to calculate, in response to said incoming loss report message and said loss of packets, a loss rate statistic; and
a transmitter to transmit an outgoing loss report message through said first port, said outgoing loss report message containing a field having said loss rate statistic written therein.

In the Advisory Action, mailed on 08/02/2005, the Examiner states:

"2) Again, there is no mention of how the loss report message and loss of packets are used to calculate the loss rate statistic (i.e., the claims do not say these are combined). Therefore, it would be inappropriate to read this limitation into the claims. Further, as described in the Final Rejection, Wesley fully uses the loss report message and loss of packets to calculate a loss rate statistic. 3) As noted in the Final Rejection, figure 3 of Wesley fully discloses a router with processor used to calculate the loss rate statistic." (Advisory Action, dated 08/02/2005).

Applicant respectfully traverses the Examiner's characterization. Wesley teaches using multicast-only data received from upstream nodes to generate a loss metric at a downstream node, then transmitting the loss metric upstream. (Figure 3; column 2, lines 52-56; column 10, lines 10-15; and column 10, lines 38-48).

Wesley is totally silent regarding Applicant's claimed novel router having a ***processor to calculate, in response to said incoming loss report message and said loss of packets, a loss rate statistic***. Note that, in Applicant's claimed invention, the novel router responds to both the ***loss report message*** and the ***loss of packets*** in order to ***calculate... a loss rate statistic***.

In sharp contrast, Wesley's loss rate is generated by downstream nodes (e.g., column 2, lines 52-56; column 7, lines 48-50; column 10, lines 10-15; and column 10, lines 38-41) and is based only on multicast session data (column 10, lines 10-15 and lines 29-30). Specifically, Wesley teaches:

> "The loss metric may be employed in pruning and congestion algorithms that execute on a repair node if **the loss ratios are propagated from the children of the repair node to the respective repair head.**" (Wesley, column 10, lines 38-41) (emphasis added)

By generating loss ratios at the downstream "children", rather than at the upstream router, using only multicast session data, Wesley does not teach or suggest Applicant's claimed novel router having a ***processor to calculate, in response to said incoming loss report message and said loss of packets, a loss rate statistic***.

Further, in the Advisory Action mailed on 08/02/2005, the Examiner stated:

> "1) There is no mention of a downstream or upstream direction for receiving and sending in the claims. It would be improper to read such a limitation into the claims where none exists." (Advisory Action, dated 08/02/2005).

Applicant respectfully traverses the Examiner's characterization. In a computer network, a router receives data packets at an upstream port and transmits a copy of the data packets from a downstream port. Thus, the ***first port... receiving a data packet*** is the upstream port, and the ***second port... transmitting said data packet*** is the downstream port. The terms "upstream" and "downstream" are used herein and were used in the Amendment filed on July 20, 2005, at Page 25, for the purpose of explaining the operation of a router in a computer network.

Applicant respectfully urges that claim 1 as written may be easily understood by a person of ordinary skill in the art of computer networking, who will understand that the router receives a packet at an "upstream" port and transmits a copy of the packet from a "downstream" port.

Further, Applicant respectfully points out that independent claims 33, 47, 61, 77, and 78 explicitly recite "***upstream***" and "***downstream***" directions.

Thus, all independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims and therefore in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

A. Sidney Johnston
Reg. No. 29,548
CESARI AND MCKENNA, LLP
88 Black Falcon Avenue
Boston, MA 02210-2414
(617) 951-2500